



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,152	08/27/2003	Harald Post	1810US01-EE	5019
43896	7590	12/13/2007	EXAMINER	
ECOLAB INC.			MAYO, TARA L	
MAIL STOP ESC-F7, 655 LONE OAK DRIVE			ART UNIT	
EAGAN, MN 55121			PAPER NUMBER	
			3671	
			MAIL DATE	
			DELIVERY MODE	
			12/13/2007	
			PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/649,152
Filing Date: August 27, 2003
Appellant(s): POST, HARALD

MAILED

DEC 13 2007

GROUP 3600

Anneliese S. Mayer
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 26 June 2007 appealing from the Office action mailed 03 March 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

NEW GROUND(S) OF REJECTION

Claim Rejections - 35 USC § 112

Claims 16 through 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Art Unit: 3671

5,150,487A	HEMPHILL	09-1992
5,582,893A	BÖTTGER ET AL.	12-1996
5,860,174A	FAILOR	01-1999

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 16 through 45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 16, the scope of the claimed invention is rendered indefinite by the recitation of “wherein the mattress is substantially the same size of a mattress.” Specifically, it is not proper for Applicant to compare the features of the claimed invention to elements that are not part of the claimed invention. Claims 43, 44 and 45 are each similarly rejected.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16 through 18, 20 through 24, 26 through 28, 30, 33, 34, and 42 through 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hemphill (U.S. Patent No. 5,150,487A) in view of Böttger et al. (U.S. Patent No. 5,582,893).

Hemphill '487, as seen in Figures 1 through 3, discloses a rescue underlay for a mattress comprising:

with regard to claims 16 and 43 through 45,

- a. a substantially flat material (1, 2), wherein the material is substantially the size of a mattress and provides spring travel (via corrugations 3);
- b. at least one pull member (L); and
- c. at least one patient securing belt (20 and 21);

with regard to claim 17,

further comprising at least one mattress retaining band (16 and 19);

with regard to claim 18,

wherein the material comprises plastic (col. 2, lines 48-54);

with regard to claim 22,

wherein the material is fire-resistant (col. 2, lines 48 through 54);

with regard to claim 23,

wherein the material further comprises a coating on the underside (col. 2, lines 48 through 54);

with regard to claim 24,

Art Unit: 3671

wherein the coating is a plastic film (i.e., Teflon);

with regard to claim 26,

wherein the plastic film exhibits a lower sliding friction than the material;

with regard to claim 27,

wherein the coating is water-impermeable;

with regard to claim 28,

wherein the coating is washable;

with regard to claim 30,

wherein the coating is readily disinfected,

with regard to claim 33,

wherein the material comprises a plurality of layers (1 and 2) of substantially flat material fixedly attached to each other (col. 2, lines 54 through 56);

with regard to claim 34,

wherein the at least one patient securing belt is attached to the underlay mat by sewing (col. 3, lines 12 through 16);

with regard to claim 42,

wherein the at least one pull member is loop; and

with regard to claims 43 and 44,

wherein the material provides spring travel (via corrugations 3).

With regard to claim 45, the method steps recited therein are inherent to the use of the device disclosed by Hemphill '487.

Hemphill '487 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claims 16 and 43 through 45,

the material being a spacer woven fabric having at least two layers spaced by bridge threads;

with regard to claim 20,

the spacer woven fabric being knitted; and

with regard to claim 21,

the spacer woven fabric having a thickness from about 4mm to about 20 mm.

Böttger et al. '893, as seen in Figures 1 through 1b, teach a woven spacing fabric (3) with at least two layers (4, 5) and bridge threads (7) for adding dimensional stability to a workpiece (col. 2, lines 20 through 52).

With regard to claims 16, 20 and 43 through 45, it would have been obvious to one having ordinary skill in the art of beds at the time of invention to modify the device shown by Hemphill '487 such that the flat material would comprise woven material as taught by Böttger et al. '893. The motivation would have been to enhance the dimensional stability of the material.

With regard to claim 20, the manner of forming the woven material (i.e., by knitting) is not germane to the issue of patentability of the device itself. Therefore, the limitation has not been given patentable weight.

Art Unit: 3671

With regard to claim 21, Hemphill '487 in view of Böttger et al. '893 discloses the invention except for the thickness of the woven fabric. It would have been obvious to one having ordinary skill in the art of beds at the time the invention was made to make the material between 4mm and 20mm thick, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

3. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hemphill (U.S. Patent No. 5,150,487A) in view of Böttger et al. (U.S. Patent No. 5,582,893) as applied to claim 24 above, and further in view of Failor (U.S. Patent No. 5,860,174A).

Hemphill '487 as modified above by Böttger et al. '893 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claim 25,

the plastic film being selected from the group consisting of polyurethane, polyester, and combinations thereof.

Failor '174, as seen in Figures 2 and 4, discloses a patient transfer mattress assembly (10) comprising a top mattress section (12) having a bottom surface (12B), wherein the bottom surface comprises a fluoropolymer film (i.e., Teflon) combined with a polyester fabric substrate (col. 2, line 64 through col. 3, line 5) for low friction, chemical and flame resistance, and barrier properties.

Art Unit: 3671

With regard to claim 25, it would have been obvious to one having ordinary skill in the art of beds at the time of invention to modify the device shown by the combination of Hemphill '487 and Böttger et al. '893 such that it would include a plastic film as taught by Failor '174.

The motivation would have been to enhance the barrier properties of the coating.

4. Claims 31 and 35 through 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hemphill (U.S. Patent No. 5,150,487A) in view of Böttger et al. (U.S. Patent No. 5,582,893).

The combination of Hemphill '487 and Böttger et al. '893 discloses all of the features of the claimed invention with the exception(s) of:

with regard to claim 31,

the material further comprising a braking surface exhibiting a higher sliding friction than the material;

with regard to claims 35 through 38,

tunnel-like receptions;

with regard to claim 39,

three patient securing belts;

with regard to claim 40,

the underlay being permanently affixed to a mattress; and

with regard to claim 41,

the underlay being integrated into a mattress.

Art Unit: 3671

With regard to claim 31, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the device shown by Hemphill '487 and Böttger et al. '893 such that it would include a braking surface. The motivation would have been to restrict the mobility of the mattress on the underlay.

With regard to claims 35 through 38, it would have been obvious to one having ordinary skill in the art of beds at the time the invention was made to modify the device shown by Hemphill '487 and Böttger et al. '893 such that it would include tunnel-like receptions for the patient securing belts to protect the same against wear during use, and to permit movement and/or replacement of the belts.

With regard to claim 39, the combination of Hemphill '487 and Böttger et al. '893 discloses the claimed invention except for three patient securing belts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include an additional patient securing belt, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

With regard to claims 40 and 41, the combination of Hemphill '487 and Böttger et al. '893 discloses the claimed invention except for the underlay being permanently affixed to or integrated into a mattress. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the underlay integral with a mattress, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put

Art Unit: 3671

together involves only routine skill in the art. Howard v. Detroit Stove Works, 150 US 164 (1893).

(10) Response to Argument

In response to Appellant's argument that the combination of Hemphill '487 and Böttger et al. '893 fails to teach material substantially the same size of the mattress, the Examiner contends use of the term *substantially* allows for variation in the size of the material. Therefore, it is not necessary for the prior art structure to be the same size as a mattress, rather it must only be *approximately* the size of a mattress. Because the material of the device taught by the combination of Hemphill '487 and Böttger et al. '893 is shown as being capable of supporting a person in Figure 3, it follows that it is *substantially* the same size of a mattress. Additionally, the Examiner notes Appellant's failure to positively recite a mattress or specify dimensions of the material leaves the claimed invention subject to interpretation as mattresses are manufactured in a wide range of sizes including, but not limited to, crib mattresses to king-sized mattresses. Moreover, an invention must be novel and nonobvious to be patented. As this relates to the claims under appeal, a purported difference in size between the material of Appellant's invention and that of the prior art is regarded as neither novel nor nonobvious. The size of the material of Appellant's invention does not result in the solution of a new problem, does not significantly affect the operation of the rescue underlay and does not require new methods or materials for manufacture. The limitation is, therefore, met by the material of the prior art combination.

In response to Appellant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so

Art Unit: 3671

long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the rejection of the claims set forth above, the Examiner's conclusion of obviousness takes into account the desirability to support the entire body of a person on an evacuation restraint device. This desirability would motivate a person having ordinary skill in the art to make the material substantially the same size of a mattress.

In response to Appellant's arguments that the material taught by the combination of Hemphill '487 and Böttger et al. '893 only provides spring travel down the center of a mattress, the Examiner contends the center of a mattress is a useful portion .

In response to Appellant's argument that the teachings of Hemphill '487 and Böttger et al. '893 are not combinable because the former teaches a rigid support surface and the latter a spacing fabric, the Examiner contends the inventions are not mutually exclusive and directs Appellant's attention to column 2 at lines 20 through 36 of Böttger et al. '893 wherein the prior art discloses the use of spacing fabric for urging the two layers apart from one another.

In response to Appellant's argument relating to the use of the spacing fabric taught by Böttger et al. '893, the Examiner notes that prior to heating the spacing fabric, it is not necessary to apply heat during rescue operations. One having ordinary skill in the art would release the spring force during the assembly and manufacture process.

In response to Appellant's argument that Hemphill '487 fails to teach a mattress retaining band, the Examiner directs Appellant's to Figure 3 of Hemphill '487 shows the mattress (M) in a rolled condition and the mattress retaining bands (16) securing the position of the mattress.

In response to Appellant's request for reconsideration of the rejection of claim 21 based upon criticality of the recited range, the Examiner contends Appellant fails to provide evidence in the Specification to support the criticality of the recited thickness for the spacer woven fabric. The Examiner, therefore, maintains the rejection of the claim as proper with the claimed range being treated as an optimal workable range.

In response to Appellant's arguments regarding claim 28, the Examiner contends that although the term *washable* does not appear in the disclosure of Hemphill '487, the coating is inherently capable of being washed and, therefore, meets the claim limitation. Specifically, the coating does not possess a characteristic to preclude the application of water to remove particles of dirt.

In response to Appellant's arguments regarding claim 30, the Examiner contends that although the term *readily disinfected* does not appear in the disclosure of Hemphill '487, the coating is inherently capable of being readily disinfected and, therefore, meets the claim limitation. Specifically, the coating does not possess a characteristic to preclude the application of a disinfectant to destroy microorganisms.

In response to Appellant's arguments regarding the rejection of claims 31 and 35 through 41, the Examiner contends it is a well known expedient in the art of beds to provide supports with braking surfaces. The use of braking surfaces is common to prevent slippage of supports relative to an underlying surface and one having ordinary skill in the art would have a reasonable

Art Unit: 3671

expectation of success modifying the rescue underlay taught by the combination of Hemphill '487 and Böttger et al. '893 such that it would include the same.

In response to Appellant's arguments regarding the rejection of claims 35 through 38, the Examiner contends the motivation to modify the invention taught by the combination of Hemphill '487 and Böttger et al. '893 such that it would include tunnel-like receptions is clearly set forth in the rejection; i.e., to protect the patient securing belts against wear during use, and to permit movement and/or replacement of the belts. A person having ordinary skill in the art would recognize the need to protect, replace and/or repair the belts and would be motivated to provide tunnel-like receptions to accommodate this need.

In response to Appellant's arguments regarding claims 39 through 41, the Examiner contends the statements amount to a general allegation that the claims define a patentable invention without specifically pointing out any error in the application of case law.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,



TARA D. MAYO

PRIMARY EXAMINER

WORKGROUP 3670

Art Unit: 3671

A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:

Donald T. Hajec


APPROVED BY
DONALD T. HAJEC
DIRECTOR, TECHNOLOGY CENTER 3600

Conferees:

Thomas B. Will



Daniel P. Stodola

